

## ABSTRACT OF THE DISCLOSURE

It is an object of the present invention to provide a magnetic disk apparatus capable of recording a servo signal onto the surface of a magnetic disk with a high degree of reliability and a high degree of efficiency without using an external write apparatus and capable of recording a predetermined servo signal onto the surface of a magnetic disk even if dimensional variations of a recording/reproducing device of a head exist.

The magnetic disk apparatus provided by the present invention comprises: an actuator for moving a head to a position above the magnetic disk in a servo track movement operation; a range limiting means for limiting a movable range of the actuator; a range specifying means for setting a specific range of the actuator in the movable range of the actuator; and a control unit for writing a servo signal into the specific range at servo track movement pitch based on servo tracks recorded with the servo signal, correcting the servo track movement pitch on the basis of the number of servo tracks in the specific range and executing control to write the servo signal at corrected servo track movement pitch.